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USA PCT National Stage Patent Application
PCT/EP01/04270 filed April 14, 2001

Rainer Arndt, et al

INSULATING ELEMENT

Priority: German Patent Applications
100 20 048.6 filed April 22, 2000
100 28 018.8 filed June 6, 2000
100 64 607.7 filed December 22, 2000

Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

S I R :

PRELIMINARY AMENDMENT

Please amend this application simultaneously with filing this
National Stage application as follows:

IN THE ABSTRACT

Cancel the Abstract and replace it with the new Abstract attached
herewith on a separate page.

IN THE SPECIFICATION

Page 1, Line 3, before this line, after the title, insert
--FIELD AND BACKGROUND OF THE INVENTION--

Page 1, Line 30, before this line insert

--SUMMARY OF THE INVENTION--

Page 1, please replace the paragraph beginning at line 37 with the following rewritten paragraph:

This object is achieved initially and substantially in the case of the introductory-mentioned subject matter wherein the film layer consists of a flame-retardant material, that the film layer also has through-openings and that the through-openings are open to vapour diffusion. The invention consequently takes the approach of forming the film layer or, as also emerges from the text below, preferably an outer film layer, only with a predominantly flame-retardant effect, but to leave through-openings which, although closed by the film, are open to vapour diffusion. The film layer itself can consequently be not permeable to vapour diffusion, or possibly only much less permeable to vapour diffusion. A first, more specific embodiment of this teaching proposes that the through-openings comprise cut-outs formed in the film layer and that these cut-outs are respectively closed by a second film of material which is open to vapour diffusion, disposed in a window-like manner. Consequently, punched openings, hole-like punched openings, can be made in the film layer and then be covered with individual, patch-like portions of a second film. For example, the second film may be adhesively bonded to the outer film layer to the extent that the cut-outs are closed by it. A very wide range of

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geometries can be used for the cut-outs, and this also applies to the embodiments still to be described below. For example, circular, rectangular, star-shaped, grid-like, and so on. In a further specific embodiment, the invention also proposes that the second film is disposed under the outer film layer and in such a way that it covers the latter even in the regions without through-openings. Consequently, film layers simply lying one on top of the other may be provided, the outer film layer being formed by the flame-retardant material and the inner film layer being formed by the material open to vapour diffusion, with the outer film layer having through-openings and the film layer which is open to vapour diffusion having no openings.

Page 3, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

With regard to the flame-retardant material, polyimide is particularly suitable and is already available on the market as polyimide films. However, a polyphenylene sulphide (PPS) film may also be used, for example. Also, a polyester (PET) film, a polyvinyl-fluoride (PVF) or polyvinyl-difluoride (PVDF) film.

Page 3, Line 31, before this line insert the following paragraph heading:

--BRIEF DESCRIPTION OF THE DRAWINGS--

Page 4, Line 17, before this line insert the following paragraph heading:

--DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT--

Page 9, Line 38, delete the paragraph starting on line 38

IN THE CLAIMS

Before claim 1, change "Claims" to --WE CLAIM:--

Please cancel claims 1-8 without prejudice or disclaimer of the subject matter therein and substitute the following claims 9-18 therefor:

9. (new) Insulation element (4, 4'), comprising at least one nonwoven layer (5) and/or a foam layer (11) being enclosed by a film layer (1), wherein the film layer (1) comprises a flame-retardant material preferably closed to vapour diffusion, wherein the film layer (1) has through-openings (2) and the through-openings (2) are open to vapour diffusion.

10. (new) Insulation element according to claim 9, wherein the through-openings (2) comprise cut-outs (2) formed in the film layer (1) and the cut-outs (2) are closed

by a second film (3) of material which is open to vapour diffusion, disposed in a window-like manner.

11. (new) Insulation element according to claim 9, wherein the through-openings (2) are formed as circular holes.

12. (new) Insulation element according to claim 10, wherein the second film (3) is disposed as a second film layer under the film layer (1) constituting an outer film layer and such that it covers the latter even in regions without through-openings (2).

13. (new) Insulation element according to claim 10, wherein the second film (3) and the film layer (1) constituting an outer film layer are laminated to each other.

14. (new) Insulation element according to claim 12, further comprising a third film layer (1') disposed under the second film layer (3) and the third film layer (1') has through-openings (2') which are open to vapour diffusion.

15. (new) Insulation element according to claim 14, wherein the third film layer (1') is made of a flame-retardant material.

16. (new) Insulation element according to claim 9, wherein the flame-retardant material is selected from the group consisting of polyimide, PPS, PET, PVF and PVDF.

Please add the following claims:

17. (new) Insulation element according to claim 15, wherein the flame-retardant material is selected from the group consisting of polyimide, PPS, PET, PVF and PVDF.

18. (new) Insulation element according to claim 12, wherein the second film (3) and the film layer (1) constituting an outer film layer are laminated to each other.

R E M A R K S

This Amendment accompanying this application is being made to cancel claims 1-8 without prejudice or disclaimer of the subject matter therein and to substitute new claims 9-18 therefor, in order to avoid multiple-dependent claim fees and to place this application in proper form and condition for examination as of

the filing of this national stage application. No multiple-dependent claim fees apply.

Therefore no multiple-dependent claim fees should be charged in this application.

The specification has also been amended for formal improvement to comply with USA practice.

An Abstract is presented on a separate page herewith.


Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached pages are captioned "Version with markings to show changes made"

The Examiner is respectfully requested to enter this Amendment prior to calculation of the filing fee as of the national stage filing date, and to provide an action on the merits.

Respectfully submitted

Rainer Arndt, et al

by: _____


MARTIN A. FARBER
Attorney for Applicants
Registered Representative
Registration No.: 22,345

866 United Nations Plaza
Suite 473
New York, NY 10017
(212) 758-2878

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

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ABSTRACT

An insulation element (4, 4'), with at least one nonwoven layer (5) and/or a foam layer (11) being enclosed by a film layer (1), and, for adequate permeability to water vapour but nevertheless flame-retardant, the film layer (1) is made of a flame-retardant material which is preferably closed to vapour diffusion, the film layer (1) also having through-openings (2) and the through-openings (2) are open to vapour diffusion.

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